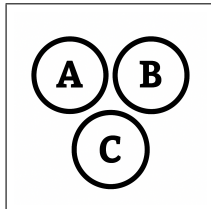


D Discrete Random Variables D



$$X(HHH) = 3$$

$$X(HHT) = 2$$

$$X(HTH) = 2$$

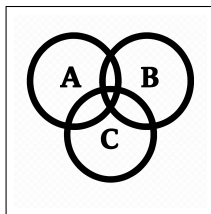
$$X(THH) = 2$$

$$X(HTT) = 1$$

$$X(THT) = 1$$

$$X(TTH) = 1$$

$$X(TTT) = 0$$



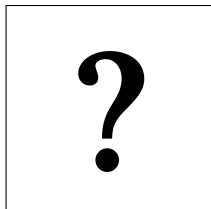
$$X : \Omega \rightarrow 0, 1, 2, 3$$

$$P(X = 0) = \frac{1}{8}$$

$$P(X = 1) = \frac{3}{8}$$

$$P(X = 2) = \frac{3}{8}$$

$$P(X = 3) = \frac{1}{8}$$



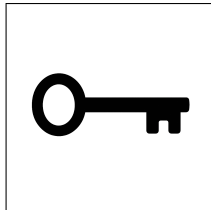
$$S = \{\text{Steve, Stanley, Joseph, Elija}\}$$

$$T = \{\text{Steve, Stanley}\} \rightarrow |T| = 2$$

$$X(\Omega) = \{S, S, J, E\} \rightarrow |X| = 4$$

$$P(X = S) = ?$$

D Discrete Random Variables D



$S = \{\text{Steve, Stanley, Joseph, Elija}\}$

$T = \{\text{Steve, Stanley}\} \rightarrow |T| = 2$

$X(\Omega) = \{S, S, J, E\} \rightarrow |X| = 4$

$P(X = S) = ?$

$$P(X = S) = \frac{|T|}{|X|} = \frac{2}{4} = \frac{1}{2} = 0.50$$